

Abstract

Title: Evaluation of benefit of Hydroxyurea capsule in treatment of patients with thalassemia Intermedia who treated with monthly packed cell transfusion.

Written by: Afshin fathi, MD, Firouz Amani, Elmira khoshbaf, MD

Address: Ardabil, daneshgah st, Ardebil University of medical science, Arums

Keyword: Thalassemia Intermedia, Hydroxyurea Capsule, Hemoglobin

Introduction: The β -thalassemia is one of the most common genetically transmitted blood disorders in the world. Sometimes Homozygote people express the some milder form of disorder called intermediate. Some drugs like HU were tested in treatment of thalassemia patients. In this study the effect of HU in intermediate patients who missed as major thalassemia and treated monthly by packed cell transfusion in BooAli Hospital of Ardebil was evaluated.

Material and method: By investigating the thalassemia major patient's files, those who had their first transfusion above 2 years old or their Hb before first transfusion was above 7mg/dl, considered as Intermedia. And all transfusions discontinued and patients treated by HU for 6 months. Before starting hydroxyurea and after 6 month of treatment, all patients underwent CBC, Serum ferritin, liver and kidney function tests. At the end of 6 months the patient need for transfusion and laboratory tests results were analyzed through SPSS.

Results: 63 patients enrolled in the study. The study group consists of 45 men and 18 women. The average age was 22.2 years (10-40 years). After 6 month, 60 of 63 patients became completely transfusion free ($p=0.001$), in 3 patients transfusion interval prolonged more than one month ($p<0.05$). We observed a decrease in serum ferritin level ($p=0.001$), and an increase in hemoglobin level ($p=0.001$). Also Rise of AST, ALT and BUN also seen after treatment with HU ($p<0.05$).

Discussion and conclusion: In thalassemia intermediate patients HU can obviate the need for regular transfusion and increase mean Hb.